

# Literature Survey

This is a summary of the article “**Prediction of Cricket World Cup 2019 by TOPSIS Technique of MCDM-A Mathematical Analysis**” by Muhammad Saqlain, Naveed Jafar, Rashid Hamid, Amir Shahzad in the International Journal of Scientific & Engineering Research Volume 10, Issue 2, February-2019.

In the article, the authors begin by providing an abstract containing the importance of predicting the result of the cricket world cup that was played from 30 May – 14 July 2019. They use **TOPSIS** (Technique for **O**rders **P**reference by **S**imilarity to **I**deal **S**olution) technique to predict true ranking and principally applied to fallouts of CRICKET WORLD CUP 2019. Hence, they predict that, by proposed technique, India has the most chances of winning the CWC2019, and the rank of team Pakistan is 7. The team Afghanistan has the lowest chances of winning.

The authors continue with the origin of Cricket and the creation of the World Cup competition concept which began in 18<sup>th</sup> century in the south east of England hence the first international match was played in 1844 and first

test match in 1887. They also praise Cricket to be the second popular game after soccer in the world.

They collected various attributes (Attribute values collected up to 10th November 2018) such as Centuries (After WC 15), Fifties (After WC 15), Chased, Total Wickets, Series Won, Series loss, Catches Drop, played on side, Played off side, All Out which are considered in the calculations which plays important role in each game and related these attributes to the countries Pakistan, India, Afghanistan, New Zealand, England, South Africa, Australia, West Indies, Bangladesh to proceed with their prediction. They use bar charts (vertical and horizontal) and line graphs for data visualization.

The main goal of this study was to predict the CRICKET WORLD CUP 2019 based on current match statistics.

Since the conditional result of a cricket match is related to many cause and unpredictable situation. Therefore, it is difficult responsibility to predict the exact and partial truth-based outcomes of cricket matches such a research expects a multi criteria decision making approach, TOPSIS to predict true ranking and principally applied to fallouts of CRICKET 2019 WORLD CUP. So, by the calculations, India has the most chance of winning the CWC2019. The Team Afghanistan has the lowest chances of winning.